

CARDIFF GREEN MARBLE
MATERIAL SAFETY DATA SHEET
1. Contact Information
Customer Service

JUSTICE PRODUCTS, LLC
P.O. BOX 10007
SAVANNAH, GA 31412

PHONE: (855) 720-2388
FAX: (912) 712-0204

Manufactured At

JUSTICE PRODUCTS, LLC
2435 OLD 421 RD.
STALEY, NC 27355

PLANT MANAGER: Mike Andrews
EMERGENCY PHONE: (855) 720-2388

2. Product Identification
Trade Name
CARDIFF GREEN MARBLE
Common Name(s)

Ground Limestone

Chemical Formula
 $\text{CaCO}_3\text{MgCO}_5$
CAS Number

1317-65-3 (in TSCA Inventory)

Physical Form

smooth, irregular/angular particles, color varies: white, gray, green

Particle Size

Size 0= 1/8"x10m; Size 1= 1/4"x1/8"; Size 2= 3/8"x1/4"

HMIS Ratings

HEALTH	1
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION	E

3. Ingredients & Hazards

Ingredient	Wt. % (Approx.)	CAS No.	OSHA PEL*	ACGIH TLV*
Ground Limestone	> 99%	1317-65-3	5 mg/m ³ Resp. 15 mg/m ³ Total	2 mg/m ³ Resp. --
Crystalline Silica, Quartz	0.1% - 0.4%	14808-60-7	0.1 mg/m ³ Resp.	0.025 mg/m ³ Resp.
Water	< 1%			

* Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted averages (TWA).

4. Hazards Identification & Cautions

Appearance smooth, irregular/angular particles, color varies: white, gray, green

Primary Routes of Entry skin contact, skin absorption, eye contact, ingestion.

Hazard Classification none (historical basis for classification)

Target Organs eye, skin and lungs

Medical Conditions Aggravated by Exposure

Skin contact may aggravate existing dermatitis.
Breathing excessive quantities of ground limestone may aggravate pre-existing respiratory conditions.

Potential Health Effects

Eye Contact This product may produce irritation upon contact with the eye. *See also Section 4 below.*

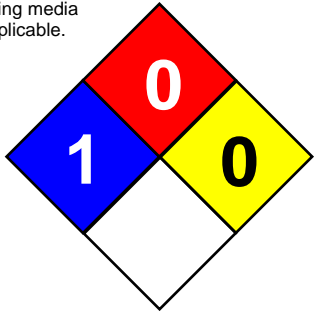
Skin Contact Prolonged or repeated exposure may cause skin irritation. Ground limestone is not expected to be absorbed through the skin in harmful amounts or to produce an allergic skin reaction. *See also Section 4 below.*

Ingestion No adverse effect is expected. If ingested, seek medical advice. *See also Section 4 below.*

Inhalation Inhalation of excessive quantities of ground limestone dust may irritate the respiratory tract. *See also Section 4 below.*

Subchronic, Chronic None expected. No applicable information was found concerning any potential health effects resulting from Subchronic or chronic exposure to ground limestone.

This product typically contains crystalline silica (quartz sand) above 0.1% as naturally occurring impurity. The International Agency for Research on Cancer has concluded that "crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (group 1)." It is also noted that carcinogenicity was not detected in all industrial circumstance studies, and may be dependent on external factors affecting its biological activity or distribution of its polymorphs. (See IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, Volume 68 (1997).) Exposure to respirable silica has also been associated with silicosis, scleroderma, nephrotoxicity (see Occupational Lung Disorders, Third Edition, Chapter 12 (1994) and American Journal of Respiratory and Critical Care Medicine, Volume 155, pp 761-765 (1997).)

5. First Aid Measures					
Eye Contact	Follow good industrial hygiene practices. In case of contact, immediately flush eyes with plenty of water. Seek medical aid if necessary.				
Skin Contact	Follow good industrial hygiene practices. Wash affected skin areas thoroughly with soap and water. Seek medical aid if necessary.				
Inhalation	Follow good industrial hygiene practices. If excessive exposure by inhalation is suspected, remove to fresh air. If necessary, a MSHA/NIOSH or OSHA/NIOSH approved respirator is recommended. Seek medical aid if necessary.				
Ingestion	Follow good industrial hygiene practices. If ingested, do not induce vomiting. If conscious, drink two glasses of water. Seek medical aid if necessary.				
6. Fire Fighting Measures					
Explosion Data	Not Explosive		NFPA 704M Hazard Classification Use Appropriate extinguishing media for packaging material if applicable. 		
LEL	Not Applicable				
UEL	Not Applicable				
Flammability	Not Flammable or Combustible				
Extinguishing Media	Product will not burn.				
Flammability	Not Flammable or Combustible				
Flash Point	Not Applicable				
Auto-Ignition	Not Applicable				
7. Accidental Release Measures					
Vacuum, pump or scoop spilled material into containers for reclaiming or disposal. Use proper respiratory and personal protective equipment. MSHA/NIOSH or OSHA/NIOSH approved respirator recommended. Spilled materials may cause slippery conditions when wet. Care should be exercised when walking on spills on floors or concrete pads. No neutralizing chemicals required. Material is inert and noncreative. Ground limestone is not a CERCLA listed hazardous substance.					
8. Handling & Storage					
Storage in a cool, dry location is recommended. Keep away from acids. Spilled materials may cause slippery conditions when wet. Care should be exercised when walking on spills on floors or concrete pads.					
Minimize dust generation and accumulation. If excessive dust is generated, provide adequate ventilation and use proper respiratory and personal protective equipment. MSHA/NIOSH or OSHA/NIOSH approved respirator recommended.					
9. Exposure Control / Personal Protection					
Hazardous Ingredient	Wt. % (Approx.)	CAS No.	MSHA PEL*	OSHA PEL*	ACGIH TLV*
Ground Limestone	> 99%	1317-65-3	10 mg/m ³ Total	15 mg/m ³ Total 5 mg/m ³ Resp.	2 mg/m ³ Resp.
Crystalline Silica	0.1% - 0.4%	14808-60-7	5 mg/m ³ Resp.	0.1 mg/m ³ Resp.	0.025 mg/m ³ Resp.
* Unless otherwise noted, all PEL and TLV values are reported as 8 hour time weighted averages (TWA).					
Respiratory Protection	If respirator is required, use of MSHA/NIOSH or OSHA/NIOSH approved respirator is recommended.				
Ventilation	Use exhaust ventilation, if required, to maintain dust concentration below recommended exposure limits.				
Protective Equipment	Wear side shield safety glasses. Rubber gloves are recommended for prolonged exposure.				
10. Physical & Chemical Properties					
Physical State	Solid		Boiling Point	Not Applicable	
Appearance & Odor	Odorless, angular particles, color varies: white, gray, slate blue, tan (some)		Freezing Point	Not Applicable	
pH (Aqueous Suspension)	9 - 10		Vapor Pressure	Not Applicable	
Specific Gravity	~2.7		Vapor Density	Not Applicable	
% Solubility in Water:	1.4 mg/100 ml @ 25°C		VOC	None	
Melting Point	825°C		Evaporation Rate	Not Applicable	

11. Stability & Reactivity				
Chemically stable?	Yes			
Compatible with other substances?	Yes (see below)			
Hazardous Decomposition/By-Products	No hazardous decomposition or by-products expected.			
Conditions Contributing to Hazardous Polymerization	None, inert and nonreactive.			
Incompatibility (Materials to Avoid)	Will react with acids to produce carbon dioxide gases.			
12. Disposal Considerations				
EPA Waste Number	Under RCRA (40 CFR 261) ground limestone is a non-hazardous waste. Dispose of waste material in accordance with all local state and federal requirements.			
13. Toxicological Information				
Ground Limestone	CAS No. 1317-65-3			
Primary Route of Exposure	Skin, Eye Contact, Inhalation, Ingestion			
Acute Health Hazards				
Eye Contact	Eye contact may cause mechanical irritation. Calcium carbonate is a severe eye irritant*.			
Skin Contact	Skin contact may aggravate existing dermatitis. Calcium carbonate is a moderate skin irritant*.			
Inhalation	Inhalation from prolonged and continuous exposure to excessive quantities of dust may aggravate existing respiratory conditions.			
* Calcium carbonate ORAL LD(50) in rats is 6,450 mg/kg.				
Chronic Health Hazards*				
Carcinogenicity*	NTP? No	IARC? No	OSHA? No	
Mutagenicity	None known			
Teratogenicity	None known			
Reproductive Effects	None known			
* Dangerous Properties of Industrial Materials, 7 th Edition, pp 667, Sax and Lewis 1989				
* See Section 3 for discussion of crystalline silica.				
14. Transport Information				
EPA Waste Number	Not regulated			
DOT Classification	Not regulated			
DOT/IMO Classification	Not regulated			
Internal UN	Not regulated			
15. Regulatory Information				
SARA Title III Section 302 Extremely Hazardous Substances				
This product does not contain extremely hazardous substances subject to the reporting requirements of Section 302 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 355.				
SARA Title III Section 311 and 312 Health and Physical Hazard Categories per 40 CFR 370.2:				
Immediate	Delayed	Fire	Pressure	Reactivity
Yes	Yes	No	Yes	Yes
SARA Section 313 Notification			TSCA	
This product does not contain toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372			Product is listed by the Initial Inventory, Vol. 1, Appendix A, CAS No. 1317-65-3	

The international Agency for Research on Cancer has concluded that "crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1)." It also noted that carcinogenicity was not detected in all industrial circumstance studies, and may be dependent on external factors affecting its biological activity or distribution of its polymorphs. (See IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, Volume 68 (1997).) Exposure to respirable silica has also been associated with silicosis, scleroderma, and nephrotoxicity (see Occupational Lung Disorders, Third Edition, Chapter 12 (1994) and American Journal of Respiratory and Critical Care Medicine, Volume 155, pp 761-765 (1997).)

WARNING

This product may also contain extremely small amounts of one or more naturally occurring materials known to the State of California to cause cancer, birth defects, or other reproductive harm.

16. Other Information

Disclaimer of Liability

Justice Products, LLC believes the information contained herein is accurate; however, Justice Products, LLC makes no guarantees with respect to such accuracy and assumes no liability in connection with the use of the information contained herein by any party. The provision of the information contained herein is not intended to be and should not be construed as legal advice or as ensuring compliance with federal, state or local laws and regulations. Any party using this product should review all such laws, rules and regulations prior to use.

NO WARRANTY IS MADE, EXPRESS OR IMPLIED, OR MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE.

JUSTICE PRODUCTS, LLC

P.O. Box 10007
Savannah, GA 31412

Plant Manager: Mike Andrews
Emergency Phone: (855) 720-2388

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